

CLAIMS

1. A polymeric amphipathic stabiliser comprising an addition polymer of hydrophobic monomer units and hydrophilic monomer units wherein the hydrophobic monomer units comprise carboxylic free acid or acid salt units and reactive monomer units selected from (a) glycidyl monomer units and (b) anhydride monomer units wherein the amount of anhydride units is either below 10% by weight total monomer units or is less than 19% by weight total carboxylic acid monomer units.
2. A stabiliser according to claim 1 in which the amount of the reactive monomer units is less than 10% by weight total monomer units.
3. A stabiliser according to claim 1 in which the amount of reactive monomer units is at least 0.5% by weight.
4. A stabiliser according to claim 1 in which the amount of the reactive monomer units is 1 to 5%, preferably 1 to 3%, by weight.
5. A stabiliser according to claim 1 in which the reactive monomer units are selected from glycidyl acrylate and glycidyl methacrylate.
6. A stabiliser according to claim 1 in which the reactive monomer units are maleic anhydride.
7. A stabiliser according to claim 1 in which the hydrophilic monomer units comprise 5 to 30% by weight carboxylic monomer units and 0 to 20% by weight hydroxyalkyl monomer units and the reactive monomer units.
8. A stabiliser according to claim 7 containing at least 10% by weight of the carboxylic acid monomer units.
9. A stabiliser according to claim 1 formed from at least 20% by weight C₈₋₂₄ (meth) acrylate units and at least 10% by weight C₁₋₄ (meth) acrylate or styrene units.
10. A stabiliser according to claim 1 comprising 25 to 70% by weight C₈₋₂₄ alkyl methacrylate, 15 to 40% methyl methacrylate and/or styrene, 5 to 30% methacrylic acid and/or maleic acid, 0 to 20% hydroxyalkyl (meth) acrylate

and 1 to 5% maleic anhydride and/or glycidyl (meth) acrylate.

11. A dispersion in liquid electrolyte of polymer particles having reacted onto their surfaces a stabiliser according to claim 1.

12. A dispersion according to claim 11 in which the liquid electrolyte is an aqueous solution containing at least 3% electrolyte.

13. A process in which a dispersion is formed in a non-aqueous liquid containing a stabiliser according to claim 1 of aqueous polymer particles having reactive groups on their surface which can be reacted with the glycidyl or anhydride groups as a stabiliser, this reaction is caused to occur and the particles are then dispersed in liquid electrolyte.

14. A process according to claim 13 in which the reactive stabiliser is added to a dispersion in non-aqueous liquid of the polymer particles wherein the dispersion has been formed in the non-aqueous liquid in the presence of a different polymeric stabiliser.

15. A process according to claim 13 in which the dispersion in the non-aqueous liquid has been formed by reverse phase polymerisation or interfacial condensation.

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